

WASHINGTON STATE DEPARTMENT OF ECOLOGY MEMORANDUM

Date: 12-3-2020

To: Laura Watson, Ecology Director

From: Mary Verner, Water Resources Program Manager

Re: Recommendation to Adopt WRIA 55 Watershed Plan Addendum

Summary

The Water Resources Program (Program), based on its analysis of the locally approved Water Resource Inventory Area (WRIA) 55 Watershed Plan Addendum (Plan Addendum), **recommends that Ecology adopt this Plan Addendum as described in RCW 90.94.020 (4) (c).**

This memorandum provides the Program's analysis and recommendations regarding Ecology's required action pursuant to the Streamflow Restoration Act, RCW 90.94.020.

As required under this law, the Program reviewed the WRIA 55 Plan Addendum in accordance with the requirements of RCW 90.94.020(4)(b) and (c), and programmatic guidance. It determined that the *"...actions identified in the watershed plan, after accounting for new projected uses of water over the subsequent twenty years, will result in a net ecological benefit [NEB] to instream resources within the water resource inventory area."*¹

Based upon a thorough review of the Plan Addendum, it is the Program's position that the WRIA 55 Planning Unit (Planning Unit) used reasonable and scientifically-sound methods to forecast new, permit-exempt domestic well consumptive use within the planning horizon. The Planning Unit forecasted 2,760 new permit-exempt domestic wells, an average watered yard size of 0.32 acres, with a projected consumptive use per well of 0.85 acre-feet per year (AFY). The Planning Unit forecasted the total impact of these new water uses to be 2,353.7 AFY. The Planning Unit identified and detailed 18 projects in the Plan Addendum to offset the impacts and achieve NEB.

The Program's recommendation is reinforced by the Plan Addendum's inclusion of a number of offset actions that are being funded through the 2019, and the 2020 Watershed Restoration and Enhancement grants. The funded projects include five water right acquisitions, the Eloika Lake Water Storage & Wetland Restoration project, and the Bear Creek Managed Aquifer Recharge project, all of which are detailed in this memo. Consequently, the Program is sufficiently assured that the work described in the Plan Addendum will offset the anticipated impacts from permit exempt wells for the 20-year planning horizon, and result in an NEB to instream resources within

¹ RCW 90.94.020(4) (c) and RCW 90.94.030(3) (c).

WRIA 55.

Authorities

RCW 90.94.020 requires the WRIA 55 Planning Unit (as well as several other planning groups around the state) to prepare an addendum to their existing Watershed Plan. This law requires each of these Planning Units to forecast the impacts of permit exempt wells from 2018 to 2038, and to identify projects and actions to offset those impacts. Planning Units must then submit a locally approved Plan Addendum to Ecology. Ecology’s statutory deadline for action for the WRIA 55 Plan Addendum is February 1, 2021. Prior to adopting any such Plan Addendum, Ecology is required by RCW 90.94.020(4) (c) to “...*determine that actions identified in the watershed plan, after accounting for new projected uses of water over the subsequent twenty years, will result in a net ecological benefit to instream resources within the water resource inventory area.*”

To support the work of the Planning Units, Ecology issued the Final Guidance for Determining Net Ecological Benefit (NEB Guidance) in July 2019. Ecology’s NEB Guidance provides that Ecology makes an NEB determination if the “*anticipated [benefits] to occur through implementation of projects and actions in a plan to yield offsets that exceed impacts within: a) the planning horizon; and, b) the relevant WRIA boundary.*”² Ecology staff, led by Brandy Reynecke, provided support throughout the process. This supplemented the financial assistance Ecology provided to support the Planning Unit’s work.

WRIA 55 Background

The Little Spokane River (LSR) Watershed covers north-central Spokane County, southern Pend Oreille County, and southeastern Stevens County in northeast Washington, as well as small portion of Bonner County in the state of Idaho. The watershed encompasses an area of about 700 square miles, 679 of which are in Washington. WRIA 55 encompasses the Washington portion of the LSR watershed. The LSR main stem begins just south of the Town of Newport and runs south for approximately 49 miles, collecting water from nine subbasins, and enters the Spokane River at Riverside State Park. Elevations in the watershed range from more than 5,300 feet above mean sea level (amsl) in the north and east sides of the basin to approximately 1,540 feet amsl at the junction of the LSR and Spokane River.

The watershed generally consists of two regions; the Columbia Plateau region in the southern portion of the basin, and the Northern Rocky Mountains region in the north. The Columbia Plateau region is broad and relatively flat with deeply incised river drainages, and the Rocky Mountains region steep-sided canyons and relatively straight river courses. Evergreen forests are the primary land cover in the mountainous areas to the north and east. Agricultural lands are interspersed throughout the watershed, but the majority are found on the south and west sides of the watershed. The remaining portions of the watershed include urban, suburban, and low density residential development, along with rangeland and wetlands.

Hydrogeology within WRIA 55 is often divided into two important components: the Spokane Valley-Rathdrum Prairie (SVRP) aquifer and Little Spokane River aquifers. The SVRP aquifer is a

² Final Guidance for Determining Net Ecological Benefit - GUID-2094 Water Resources Program Guidance - July 31, 2019 - Publication 19-11-079

prolific aquifer that is interconnected with the Spokane River and the lower portion of the LSR, below the Dartford gage. It is governed under WAC 173-557, and is not associated with the planning requirement for WRIA 55 in RCW 90.94. Spokane County previously received a grant from the Bureau of Reclamation's Drought resiliency grant program to develop modeling tools to identify and quantify projects aimed at enhancing streamflows. Through that project, a transient integrated surface and groundwater model was developed for WRIA 55 by EarthFX, a consulting group specializing in groundwater modeling, using the United State Geological Survey's modeling package GSFLOW (WEST, EarthFX, 2018). The Planning Unit used this model in preparing the Plan Addendum.

Summary of the Planning Unit's Approval Process

The WRIA 55 Initiating Governments for the watershed planning process are Spokane County, Stevens County, Pend Oreille County, the City of Spokane, and Whitworth Water District. The Planning Unit is comprised of the initiating governments and other governmental and non-governmental entities.³ The local Plan Addendum approval process, as described in a Memorandum of Agreement (MOA) between the initiating governments, was shared and discussed with the WRIA 55 Planning Unit at their first and second meetings. There were no formal objections to the MOA or approval process.⁴

In accordance with the MOA, the Planning Unit reviewed technical tasks and memorandums, policy decisions, and the Plan Addendum. Spokane County Environmental Services (Spokane County) served as the lead agency.

Spokane County hired Aspect Consulting, LLC (Aspect) to facilitate planning unit meetings, conduct supporting technical tasks, and prepare the Plan Addendum. In November 2018, the first meeting of the WRIA 55 Planning Unit was convened to begin the process of updating the WRIA 55 portion of the WRIA 55/57 Watershed Plan through this Plan Addendum. Since that time, seven total Planning Unit meetings were held, along with two technical workshops, in support of the collaborative process involved in preparing the Plan Addendum. Planning Unit Meeting agendas and meeting minutes are available on the WRIA 55 Watershed Plan Update page on Spokane County's website.

Throughout the entire planning process Spokane County made a consistent effort to ensure that all relevant analysis and project information was provided to the Planning Unit in a timely manner, with clearly identified opportunities provided for discussion on topics of interest or disagreement. All members demonstrated a concerted effort to reach consensus on substantive issues.⁵

Spokane County distributed the draft Plan Addendum to the Planning Unit on July 2, 2020, followed by a four-week comment period. The Planning Unit met on July 16th, in the middle of the comment period, to review the Plan Addendum with focus on the NEB analysis. At the meeting, no Planning Unit member expressed objections to the plan or the conclusion that the plan will result in

³ See WRIA 55 Plan Addendum, Appendix A for membership details.

⁴ As a technical and policy advisor to the Planning Unit, Ecology abstained from all votes related to approval of the Addendum.

⁵ E.g. Throughout the process, multiple revisions were made to the future permit-exempt domestic well demand estimate in order to address comments and concerns from multiple Planning Unit members.

an NEB. Spokane County also shared with the Planning Unit at the July 16 meeting the process by which they would indicate whether they support locally approving the Plan Addendum.

Planning Unit members were asked to submit comments July 30th and indicate if they endorsed approving the draft Plan Addendum through email and comments. If no comments were received from a Planning Unit member, Spokane County assumed endorsement. Spokane County also sent follow up emails to all Planning Unit members to remind them of the endorsement process and to solicit comments. If a Planning Unit member submitted comments, they were asked to indicate if they endorsed approving the draft Plan Addendum, endorsed with reservations (they can “live with it”)⁶, or did not endorse the Plan Addendum.

Spokane County provided the Planning Unit members all of the comments received. These comments were submitted by the City of Spokane, the Kalispel, Spokane, and Colville Tribes, the Center for Environmental Law and Policy (CELP), and the Eloika Lake Association. Department of Ecology staff also submitted comments consistent with its advisory role.

During this stage of review, both CELP and the Eloika Lake Association indicated in their comments that they did not endorse that draft version of the Plan Addendum as written. The Spokane Tribe indicated that they endorsed the plan with reservations. The Initiating Governments met to discuss the comments and ensure that “all participant interests and concerns are considered” as described in the MOA.

Based on that discussion, Spokane County revised the Plan Addendum to address the comments. They then contacted the Spokane Tribe, CELP, and the Eloika Lake Association to discuss the revisions and to determine if these entities would consider modifying their position. After discussions, both the Eloika Lake Association and CELP endorsed the plan, though CELP did so “with reservations.”

The Spokane Tribe acknowledged the revisions improved the Addendum, but continued to endorse the Plan Addendum with reservations. The Tribe’s reservations are as follows:

- The LSR frequently falls below the minimum instream flow. The Tribe is concerned that the Plan Addendum implies there will be a surplus of water in the watershed, when actually the WRIA will continue to operate at a deficit.
- They are concerned that there is a projected deficit described in two subbasins the Tribe identifies as ecologically important.
- They point out that previous planning efforts in this basin have identified projects that have not been implemented and are concerned that the same will be true for this Plan Addendum.
- They express concerns that the water coming out of the Eloika Lake storage project may not be of high enough quality to support healthy fish populations.
- The Tribe has also acknowledged that while the scope of this planning effort is too narrow to comprehensively address the water availability issues in WRIA 55, as long as the projects in this Addendum are implemented (and implemented well), the Addendum has the

⁶ Based on conversations between Spokane County and the entities with reservations, it appears unlikely they will appeal an adoption order because their reservations are related to issues in the watershed that are beyond the scope of this planning effort. See section 1.3 in the Plan Addendum for more information about the approval process.

potential to achieve NEB.

After the revisions and outreach discussed above, the Initiating Governments determined that “all participant interests and concerns were considered” and moved to the approval process as provided in the MOA. The MOA required four out of five of the initiating governments to move for local approval of the Plan Addendum, and all five agreed to approve. Each of the Initiating Governments, with the exception of Stevens County, approved the Plan Addendum through their respective established legislative processes, satisfying the MOA.

Stevens County has yet to formally approve the Plan Addendum through their local legislative process. Nevertheless, the County has stated that they support locally approving the Plan Addendum and intend to implement their local approval process after their County Commissioners are all elected, or appointed, and have taken office⁷. They anticipate signing the Addendum in late November. Their signature page will be added to the Plan Addendum as soon as practicable.

Technical Review of WRIA 55 Plan Addendum

Program staff determine that the WRIA 55 Plan Addendum submitted by the Planning Unit meets the requirement of chapter 90.94 RCW to identify projects and actions necessary to offset the potential consumptive use associated with new permit-exempt domestic well withdrawals anticipated through 2038.

Section 3 in the Plan Addendum laid out the methodology used by the Planning Unit to quantify the anticipated new consumptive uses over the twenty-year timeline. The Plan Addendum predicts that 2,760 new houses will rely on permit-exempt domestic wells which will result in new consumptive uses totaling 2,354 AFY. This includes conservative estimates for growth projections and outside lawn and garden watering rates that over-estimate the consumptive volumes. Beyond this, the Planning Unit added a 10% safety factor to account for climate change impacts in the watershed.

Section 4 of the Plan Addendum identifies seven water right acquisition projects, nine MAR projects, one surface water storage and release project and one source exchange project that collectively will provide water offset benefits within the WRIA of 4,082 AFY. That benefit will, when implemented, exceed the offset volume required under RCW 90.94 planning by 1,728 AFY. This excess water and the instream benefits it provides helps to offset (at the WRIA scale) the water deficit in Dartford and Deadman Creeks. Spokane County already acquired two of the water rights and are actively pursuing additional water rights from interested sellers.

The Plan Addendum also identifies ten non-water offset habitat enhancement projects that will improve instream conditions within their respective subbasins and downstream. The plan describes the range of anticipated benefits associated with these projects. Many of these projects are designed to provide long term benefits by removing barriers to quality spawning and rearing areas as well as addressing the restoration needs in identified priority areas.

All offset projects identified by the Planning Unit have advocates/project proponents who will

⁷ Phone conversation between Brandy Reynecke (ECY) and Erik Johansen, Stevens County Land Services Director and representative for Stevens County.

likely pursue funding to implement their respective projects.

The portfolio of projects will offset projected impacts from permit-exempt domestic wells in multiple subbasins and at the WRIA scale. They will enhance streamflow in subbasins that have a surplus of offset water. They will improve biological function in all of the subbasins that implement habitat projects. Collectively, they will result in NEB in WRIA 55.

The Plan Addendum makes clear statements that the Planning Unit believes NEB will be achieved.

Taken as a whole, the analyses in the Plan Addendum indicate that relative to the detriments created by future permit-exempt domestic wells anticipated in WRIA 55 over the 20-year timeline, the offset strategies proposed will result in NEB for the watershed.

Therefore Ecology technical staff conclude that the plan developed in the Plan Addendum meets the intent of the Legislature and requirements of RCW 90.94, and, when implemented, will result in a net ecological benefit to instream resources within WRIA 55 in the context of chapter 90.94 RCW.

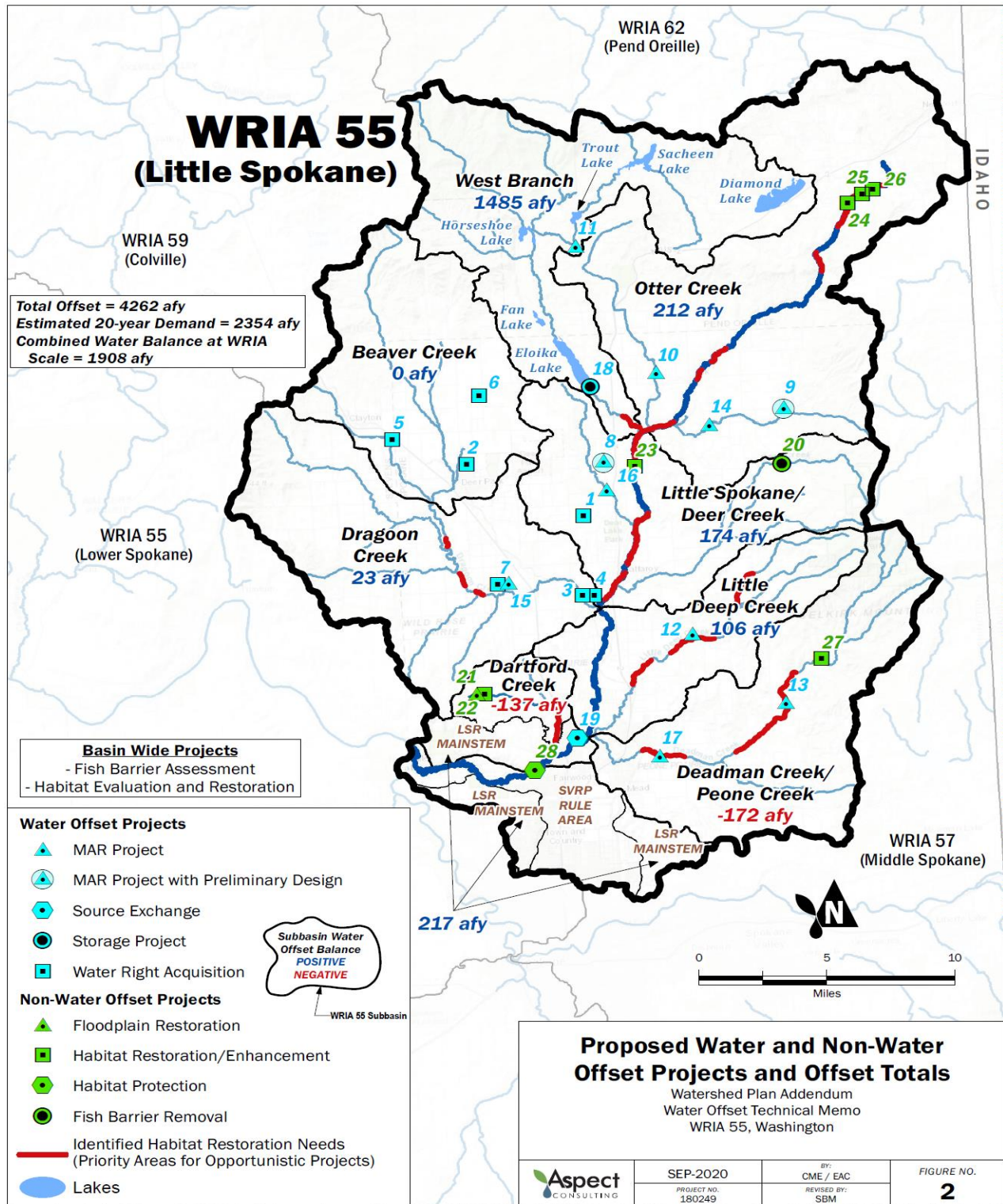
Project Cost Estimates and Funding

For planning purposes, the cost estimates included in the Plan Addendum meet the intent to provide reasonable assurances for the projects. Project cost estimates are becoming more refined as Planning Unit Members apply for, and are awarded, funding.

Both Stevens and Spokane Counties have applied for several streamflow restoration grants for MAR projects. One of the Spokane County MAR projects, Bear Creek MAR, was recently awarded funding through the 2020 SFR Competitive Grants program.

Some preliminary work has been done on the Eloika Lake water storage project. This project was also awarded funding through the 2020 SFR competitive grant program for feasibility study work.

The Planning Unit did not include cost estimates for water acquisition projects listed in the Plan Addendum because prices are always contingent upon reaching an agreement between the buyer and the seller and can vary. However, Spokane County successfully purchased two of the water rights described in the Plan Addendum and has recently negotiated three Purchase and Sale Agreements to acquire four more water rights described in the Plan Addendum. As such, they have a good handle on what it costs to purchase water rights.



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Figure 1 Proposed project locations, type, and cumulative offset by subbasin.

Net Ecological Benefit

Ecology's NEB Guidance provides that Ecology makes a Net Ecological Benefit determination if the "*anticipated [benefits] to occur through implementation of projects and actions in a plan to yield offsets that exceed impacts within: a) the planning horizon; and, b) the relevant WRIA boundary.*"

The WRIA 55 Plan Addendum estimates new permit-exempt domestic uses established between 2018 and 2038 will have a total consumptive water use impact of 2353.7 AFY, and the total water for water offset from the projects in the Addendum will be 4082 AFY, exceeding the offset target by 1728.3 AFY.

Additionally, the Planning Unit identified habitat projects in four subbasins that will improve wetland functions, riparian habitat, instream habitat, and habitat function. These projects will also likely add shade and increase groundwater recharge to reduce stream flow temperatures in the summer – further enhancing instream resources.

The Planning Unit concluded that their Addendum provides a net ecological benefit to WRIA 55 as required by RCW 90.94.020 because it proposes projects that will fully offset and exceed the consumptive use and instream flow impacts of new permit-exempt domestic water uses from 2018 to 2038. Furthermore, many of the projects identified can be expanded in the future to provide additional offset for new permit-exempt domestic water uses after 2038.

Recommendation

The Water Resources Program, based on its analysis of the locally approved Water Resource Inventory Area 55 Watershed Plan Addendum, concurs with the Planning Unit's conclusion and recommends that Ecology adopt this Addendum as described in RCW 90.94.020 (4) (c).